# PRONUNCIATION, ORTHOGRAPHY, AND SYNTAX 

GENERAL MEDICINE 2
© Mgr. Karel Černý, Ph.D. 2010

## OUTLINE

- Orthography, diacritic
- Pronunciation
- Word classes in Basic Medical Terminology
- Relations of word classes in BMT


## Orthography

- Classic Latin had different orthography and pronunciation.
- For example: originally only capital letters were used, "u" was expressed using "v" (IANVARIUS instead of $J A N U A R I U S)$ etc.
- Classic Latin also used diacritic signs namely macron (vena). Today macron is used only in textbooks and dictionaries. Physicians do not use diacritics.


## Alphabet

- Roman alphabet (Latin alphabet) is based on Greek which was created from Phoenician alphabet.
- Following letters were used in the beginning: A, B, C, D, E, F, G, H, I, L, M, N, O, P, Q, R, S, T, V.
- Non-native letters:
- Z is used for Greek loanwords containing consonant zeta $\zeta$.
- PH, TH, and CH stand for Greek loanwords with $\Phi$ (phi), $\Theta$ (theta) and $X$ (chi).
- Y is another letter influenced by Greeks. It is pronounced as [i] in Latin.
- J was originally expressed by "I". In so called church Latin or medieval pronunciation often both can be used: iustitia x justitia.
- The distinction between "U" (vowel) and "V" (consonant) was introduced later to avoid confusion.
- There was no " K " in the classic Latin, on the other hand "C" was always pronounced as [k]. Later, " K " was adopted for Greek loanwords and in medieval Latin the pronunciation of "C" was divided to [k] or [ts].


## Pronunciation

- Pronunciation of Latin language is different depending on region and/or historical context.
- We have basically two possibilities:
- English pronunciation (very different from all others, applies English pronunciation rules to Latin words)
- so called "church Latin" - mediaeval pronunciation used with small variations throughout the rest of Europe, including Czech Republic, Germany, Italy etc.
- Latin orthography is "phonetic" i. e. "what you see is what you pronounce".
- List of the most distinct differences follows:

| Letter | Example | IPA phonetic | Czech equivalent | English pronunciation |
| :---: | :---: | :---: | :---: | :---: |
| ae (æ) | saepe, bonae | [e:] | é | /ei/ or /i:/ |
| C followed by [e,i] | cista, caeruleus | [ts] | C | /s/ |
| ch | pulcher | [x] | ch | /k/ |
| $\overline{\mathbf{e}}$ (and other vowels with macrons) | vēna | [e:] | é | /ع/, /ei/ or /i:/ |
| g followed by [e, i] | agimus | [g] | g | /dz/ |
| h | homo | [h] | h | /h/ or /-/ |
| oe (œ) | foetus | [e:] | é | /i:/ |
| qu | questio | [kv] | kv | /kw/ |
| SC followed by [e,i] | ascites | [sts] | SC | /s/ |
| ti followed by vowel and not precedented by s,x | fractio | [tsi] | ci | /JI/ (in Czech ši) |

## Examples

- ruptura musculi bicipitis
- [ruptu:ra muskuli bitsipitis]
- fractura carpi
- [fraktura karpi]
- lagoena aquae
- [lage:na akve:]
- philosophia, thesis, menorhea
- [filozofia, $\mathrm{t}(\mathrm{h})$ esis, menorhea]
- caput hominis
- [kaput $\mathrm{h}(!)$ ominis]
- intestinum caecum
- [intestinum tse:kum]
- vagina, fascia, staphylococus aureus
- [vagina (not -d3-), fastsia, stafilokokus aureus]


## Word Classes in Basic Medical Terminology

- Various languages have various sets of word classes.
- English use following classes:

nouns<br>pronouns<br>adjectives<br>verbs<br>prepositions

- Medical terminology uses only nouns, adjectives, (verbs, prepositions are required for GM) and as a semi-independent category also numerals.


## Relations between word classes

- Noun - noun relation (if a noun becomes an attribute of other dominant noun)
- fracture of bone - fractura ossis. (The attribute is in bold type.)
- Noun - adjective relation (an adjective is attribute of the noun).
- complicated fracture - fractura complicata.


## Noun - noun relation

- Remember: the second noun (i.e. the attribute) must be given in the genitive case. In other words: the word after the "of" in English will be in genitive.
- Both grammatical numbers can be used (Sg. or Pl.).


## Examples

- fracture of scapula
- rupture of vein
- bottle of vine
- fractura + scapula $=$ fractura scapulae (scapulae is in Gen.)
- ruptura + vena $=$ ruptura venae (venae is in Gen.)
- lagoena + vinum = lagoena vini
(vini is Gen. case)


## Instructions

- Step 1: Verify that you have two nouns.
- Step 2: Translate both words to Latin.
- Step 3: Transform the $2^{\text {nd }}$ noun to Genitive grammatical case (i. e. replace its nominative ending with genitive one).


## Notes

- This relation says nothing about the dominant member of the link. It could be in nominative, or in genitive depending on context.
- Grammatical numbers (singular/plural) are preserved during the transformation.


## Noun - adjective

- The dominant component is always a noun.
- You must extract following information from the noun:
- grammatical gender,
- grammatical case,
- grammatical number.
- Then you those parameters to the given adjective. This process may result in similar ending (example: vena saphena), but usually not (vena lateralis).


## Instructions

- Step 1: analyse the noun and extract gender, case, and number information.
- Step 2: Transform the adjective to required form.


## Examples

- short illness
noun: morbus
(masculine, Nom., Sg.) adjective: brevis
- long bone noun: os
(neutral, Nom., Sg. form of the noun) adjective: longus
- morbus brevis
"brevis" is masculine, Nom., Sg. form of the adjective
- os longum
"longum" is neutral, singular form in Nominative grammatical case.


## Other relations

- During the summer term you will learn following additional relations:
- preposition - noun
- preposition - noun - adjective


## Summary

- Go to the vocabulary.pdf and read all the nouns from the $1^{\text {st }}$ declension at least once aloud.
- Start to memorise words from the $1^{\text {st }}$ declension.
- Review grammar, write down any question that comes to your mind, ask at the beginning of the next lesson.

